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| APPLICATION NO.         | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-------------------------|-------------|----------------------|---------------------|------------------|
| 10/810,113              | 03/25/2004  | Peter Arthur Schade  | 2797P               | 8045             |
| 29141                   | 7590        | 12/30/2004           | EXAMINER            |                  |
| SAWYER LAW GROUP LLP    |             |                      | NGUYEN, MIKE        |                  |
| P O BOX 51418           |             |                      | ART UNIT            | PAPER NUMBER     |
| PALO ALTO, CA 94303     |             |                      | 2182                |                  |
| DATE MAILED: 12/30/2004 |             |                      |                     |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                      |  |
|------------------------------|------------------------|----------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b>  |  |
|                              | 10/810,113             | SCHADE, PETER ARTHUR |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>      |  |
|                              | Mike Nguyen            | 2182                 |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 26 August 2004.

2a) This action is FINAL.                    2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-14 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-14 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

|  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Notices & Remarks***

1. Claims 1-14 are pending for the examination.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Benayoun et al. (U.S. Pat. No. 6,725,302 B1).

As to claim 1, Benayoun teaches a signal I/O interface (fig. 4) comprising:

a host port (UP port 18); and

a peripheral port (DO port 24), wherein the host port and the peripheral port are defined using predetermined signals (col. 4 line 34 to col. 5 line 6 wherein repeater 44 is used to switch and ensure bi-directional connectivity between the upstream port 18 and the downstream port 24).

As to claim 2, Benayoun teaches the interface of claim 1 wherein the host and peripheral ports are USB ports (fig. 4 wherein USB hub 10 comprises the UP port 18 and the DO port 24).

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As to claim 3, Benayoun teaches the interface of claim 1 wherein two connected devices can have a peer-to-peer connection via the host port and the peripheral port (fig. 2 host computer 16, modem 36 col. 4 lines 25-33 wherein the host computer can communicate with the modem 36 via the UP port 18 and the DO port 24).

As to claim 4, Benayoun teaches the interface of claim 1 wherein two connected devices can have on-to-many relationship via the host port and the peripheral port (fig. 3 host computer 16, modem 36, video camera 40 col. 4 lines 25-33 wherein the host computer can communicate with the modem 36 and the video camera 40 via the UP port 18 and the DO port 24 and a DO port 42).

As to claim 5, Benayoun teaches the interface of claim 1 wherein a device only needs one physical I/O port via the interface (fig. 3 wherein the host computer 16, the modem 36 or the video camera 40 respectively connects to the USB hub 10 via the UP port 18, the DO port 24 or the DO port 42).

As to claims 6, 11 and 14, Benayoun teaches the predetermined signals comprise host differential data lines and peripheral differential data lines (col. 4 lines 44-47 wherein data are transferred through the repeater 44 from the host computer 16 to the modem 36 and the video camera 40, or from the modem 36 and the video camera 40 to the host computer 16).

As to claim 7, Benayoun teaches a USB network (fig. 3) comprising:

a first device (hub 10); the first device including a signal I/O interface (HUB 1), the interface including a host port (UP); and a peripheral port (DO) wherein the host port and the peripheral port are defined using predetermined signals (fig. 4 col. 4 line 34 to col. 5 line 6 wherein repeater 44 is used to switch and ensure bi-directional connectivity between the UP port 18 and the DO port 24); and

a second device (hub 12) for communicating with the first device, the second device using the predetermined signals (col. 4 lines 25-33).

As to claims 8 and 9, Benayoun teaches the predetermined signals are within a standard and the standard comprises the universal serial bus (USB) standard (fig. 4 wherein USB hub 10 comprises the USB UP port 18 and the USB DO port 24).

As to claim 10, Benayoun teaches the USB network of claim 9 wherein the first and second devices can be any of a camera, computer, personal digital assistant, laptop device, handheld device, printer, and cellular telephone (fig. 3 host computer 16, camera 40).

As to claim 12, Benayoun teaches a device (fig. 3 hub 10) comprising:  
a processor (fig. 4 controller 46); and  
a single I/O interface (HUB 1) coupled to the processor, the interface comprising a host port (fig. 4 UP port 18); and a peripheral port (fig. 4 DO port 24), wherein the host port and the peripheral port are defined using predetermined signals (col. 4 line 34 to col. 5 line 6 wherein

repeater 44 is used to switch and ensure bi-directional connectivity between the UP port 18 and the DO port 24).

As to claim 13, Benayoun teaches the device of claim 12 wherein the single I/O interface requires a connection to only one physical I/O port (fig. 2 col. 4 lines 9-19) if the device is coupled to a device with a connector that includes a host port and a peripheral port which are defined using the predetermined signals (fig. 5 hub 12, DO port 42, UP port 64 col. 5 lines 7-25).

*Conclusion*

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Pat. No. 6,067,628 (Krithivas et al.)

U.S. Pat. No. 4,833,649 (Greub)

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mike Nguyen whose telephone number is 571 272-4153. The examiner can normally be reached on 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on 571 272-4146. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mike Nguyen  
Patent Examiner  
Group Art Unit 2182

12/21/2004



MICHAEL GAFFIN  
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